

What is claimed is:

1. An effect system that applies an effect to an audio signal, comprising:
 - segment designation means for designating a segment of an input signal;
 - storage means for storing the segment;
 - first time interval designation means for designating a time interval during which the segment is to be repeatedly output; and
 - loop output means for repeatedly reading and outputting the segment during the time interval.
2. The effect system claimed in Claim 1, further comprising:
 - tempo designation means for designating a tempo of the input signal;
 - timing designation means for designating the timing of the beginning of the segment with respect to a designated tempo; and
 - second time interval designation means for designating a length of the segment with respect to a designated tempo,wherein the system is configured such that the segment designation means designates a segment of the input signal based on the timing that has been designated by the timing designation means and the length that has been designated by the second time interval designation means.
3. The effect system claimed in claim 2, wherein the previously mentioned first time interval designation means designates the time interval during which the segment is to be repeatedly output as a type of note with respect to a tempo designated by the tempo designation means.
4. An effect system that applies an effect to an audio signal, comprising:
 - segment designation means for designating a segment of an input signal;
 - storage means for storing the segment;
 - count designation means for designating a number of times to output the

segment; and

loop output means for reading and outputting the segment a number of times designated by the count designation means.

5. The effect system claimed in Claim 4, further comprising:
tempo designation means for designating a tempo of the input signal;
timing designation means for designating the timing of the beginning of the segment with respect to a designated tempo; and
time interval designation means for designating a length of the segment with respect to a designated tempo,
wherein the system is configured such that the segment designation means designates a segment of the input signal based on the timing that has been designated by the timing designation means and the length that has been designated by the time interval designation means.

6. A programmable effect device that applies a loop effect to an audio signal, the device comprising a computer readable medium storing programming code for controlling the device to perform processing comprising:

receiving user input specifying a start time of a segment of an audio signal;
receiving user input specifying a duration of the segment;
receiving user input specifying an interval in which the segment is to be repeatedly output;
storing a segment of an input audio signal in accordance with the specified start time and duration; and
repeatedly outputting the stored segment during the specified interval in accordance with the specified interval.

7. The effect device claimed in claim 6, wherein the user input specifying a start time of the segment indicates a note location within the audio signal with respect to a tempo of the audio signal.

8. The effect device claimed in claim 7, wherein the processing further comprises receiving user input specifying a tempo of the audio signal, and wherein the segment is stored by identifying the start time of the segment from the user specified note location with respect to the user specified tempo.

9. The effect device claimed in claim 7, wherein the audio signal includes tempo information, and wherein the segment is stored by identifying the start time of the segment from the user specified note location with respect to the tempo information of the audio signal.

10. The effect device claimed in claim 6, wherein the user input specifying a start time is a manual start signal generated by the user during performance of the audio signal.

11. The effect device claimed in claim 6, wherein the user input specifying the length of the segment indicates the length of the segment as a musical time interval with respect to a tempo of the audio signal.

12. The effect device claimed in claim 11, wherein the segment is stored by identifying the end of the segment from the user specified musical time interval with respect to a user specified tempo.

13. The effect device claimed in claim 11, wherein the segment is stored by identifying the end of the segment from the user specified musical time interval with respect to the tempo information included in the audio signal.

14. The effect device claimed in claim 6, wherein the user input specifying the interval in which the segment is to be repeatedly output indicates a musical time interval with respect to a tempo of the audio signal.

15. The effect device claimed in claim 14, wherein the segment is

repeatedly output until the end of an interval determined from the user specified musical time interval with respect to a user specified tempo.

16. The effect device claimed in claim 6, wherein the segment is repeatedly output until the end of an interval determined from the user specified musical time interval with respect to the tempo information included in the audio signal.

17. The effect device claimed in claim 6, wherein the user input specifying the interval in which the segment is to be repeatedly output indicates a number of times to output the segment.

18. The effect device claimed in claim 6, wherein the processing further comprises terminating the repeated outputting of the stored segment in response to a user supplied manual stop command.

19. The effect device claimed in claim 6, wherein the processing further comprises receiving user input specifying that the effect is to be synchronized to tempo data included in the audio signal.

20. The effect device claimed in claim 6, wherein the processing further comprises receiving user input specifying a tempo of the audio signal.

21. A method for applying a loop effect to an audio signal, comprising:
receiving user input specifying a start time of a segment of an audio signal;
receiving user input specifying a duration of the segment;
receiving user input specifying an interval in which the segment is to be repeatedly output;
storing a segment of an input audio signal in accordance with the specified start time and duration; and
repeatedly outputting the stored segment during the specified interval in

accordance with the specified interval.